

DEC 02 2002

U.S. PATENT & TRADEMARK OFFICE  
SEQUENCE LISTING

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(I) GENERAL INFORMATION:

(i) APPLICANT: ZENECA LIMITED , . .  
(ii) TITLE OF INVENTION: GENE SILENCING

(iii) NUMBER OF SEQUENCES: 3

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: IP DEPT., ZENECA AGROCHEMICALS

(B) STREET: JEALOTTS HILL RESEARCH STATION,

(C) CITY: BRACKNELL,

(D) STATE: BERKSHIRE

(F) ZIP: RG42 6ET

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk  
(B) COMPUTER: IBM PC compatible  
(C) OPERATING SYSTEM: PC-DOS/MS-DOS  
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: GB NOT KNOWN  
(B) FILING DATE:

(C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 01344 414822

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3681 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

(vi) ORIGINAL SOURCE:

(A) ORGANISM: 1-AMINO CYCLOPROPANE-1-CARBOXYLIC ACID

OXIDASE

(vii) IMMEDIATE SOURCE:

(B) CLONE: pTOM13

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

AAATTTGATA GATTCAAGTTT TTATGTTTT AGTGCTGATT ACAACATTGA AATTCTAAAT 60

TTAGAATTAA ATATTTATTA AATGTTAGTG CATTATACAA AATAACATAT  
TACATCTCAA 120

TTTAGGAAAA GGTTTGAAAT TGACTATTCT TTTTTGGTA GGAAAAAGTT  
TAGGACTCTA 240

TAAATAGAGG CATGTTCCCTT CTAACCTAAT TAGCATTAC AATGAGTTT  
TAAGGGCTTT 300

GAGAGTTTG GTTAGAGGGA GAATTGTGA ACCTCTCATG  
TATTCCGAGT GAATTGGTTG 360

AGGTGTTTC CCTCTGTATT TTGTACTCTC ATGTTATAG TGGATTGCTC  
ATTCCCTTG 420

TGGACGTAGG TCGATTGACC GAACCACGTT AAATTTTGT GTCTTTG GT  
ATATTCCTG 480

TTCTTCTTAC TCGGGTCTT TCGAGGTTTG CTTGCTAGC TICCGCGTTT  
ACACCTGCTT 540

ATTTCGGTC CTAACAAGTG GTATCAGAGC CAGATTCAAT  
AATGGAGTCA GGTGTAGTGG 600

TTCGATAATC GATGATTGAA CCAAGTTAGA AAGAGGTGTT  
CATCTTGACG GGTGTAGTTC 660

TAGCCGCAAC CTTTGACA GTAATGAAGA TTTGATGGA GAAATTGTTT CAGAGAGTT  
720

CTCTGTGTTG AGACATAAAT TTTGAAAGG AGATTATGGA  
GAGGAGAAGC AAGTTGTTGA 780

AGATTAAGTA AAGAAGGTGG ACAAATCTAT TTTGTCAGAA  
ATTCAGGCCA AGGGGGAGAT 840

TTGTTGGGTT TTATTTGCCCTGATTTTTA CCATAAATAG GTTTTGTGTT  
AAGGAAAAGG 900

TTTGAAATTG ACTATTCTT TTTGGTAGG AAAAGGTTA GGATTCTATA AATAGAGGCA  
960

TGTTCCCTCT AACTTAATTAA GCATTCACAA TGTAGTTTA AGGGCTTTGA

TAGAGGGAGA ATTTGTGAAC CTCTCATGTA TTCCGAGTGA  
ATTGGTTGAG GTTGTTC 1080

TCTGTATTT GTACTCTCAT GTTTATAGTG GATTGCTCAT TICCTTG TG  
GACGTAGGTC 1140

GATTGACCGA ACCACGTTAA ATCTTTGTGT CTTTGGTAT ATTTCTCGTT  
GTCTTCTTAC 1200

TCGTGGTCTT TCGAGGTTTG CTTTGCTAGC TTCCGCGTTT ACACCTGCTT  
ATTTGCGGTC 1260

CTAACAGAGT TCGATGGGTT GAATCTATAA AAAGAAAAAT ATACTCGTGA  
TTCACGATTA 1320

TTTATATGAA AATATAATAA ATATTGAATT TCCTTGCTA TTTCTTATGT  
TTACGTCTT 1380

ATATTCAAA TTATTCCACC AATACTGACA AGCCCTAGGC  
CATCTCTAGG AAATTCATAC 1440

AATTTTTTTT TTGTTGTTAA CTAGTTAAAT TGGCAGCCTT AAAGATTATT  
GTAAAATTCA 1500

AGGCAACTTC CTCAAGTACT ACAACTACAT TGTAACATCC  
CAGTCAAAGT GTCCTAAAAT 1560

TTTATAAAAT TTGACACATG AAACAATAGC ACAATAAATT  
TTAGTACTAT TGCAGCCATG 1620

GCCCATAAGC CATCATGTAT TATAGTCAAA ATGGGTCTT  
TTCCAATTG TCTTGATCCC 1680

AAAATCCCTT TGTAAGTAAG ATGGTAAAT AAGGAAATAT GAACTTTAAAG TTAAAGTTTG  
1740

ACTCATAGAC TTGTCATAAC TCATAAAGAC TTGGAATATA  
ATAATTATTC ATTTAAATTA 1800

TAATTCTCTA CTTTAATATC TTCTACTATA AATACCCCTT CAAAGCCTCA

ATCAAACATT GATATTCA TCCTCAATCT TTTGTATTCA CATATTCTAT  
TTATTCAATA 1920

CACTTAGGAA AACACTTAC CAAGAAATTA AGATGGAGAA  
CTTCCAATT ATTAACTTGG 1980

AAAAGCTCAA TGGAGATGAG AGAGCCAACA CCATGGAAAT  
GATCAAAGAT GCTTGTGAGA 2040

ATTGGGGCTT CTTGAGGTA ATCATAAATT ACATAAACAT  
ATTAATATGT TTGTTCAAT 2100

TTATCAGTCA TACTTTCTC TGTTTAAAA TTAATGTCAC TTTCAATATT TAATAATTG  
2160

CATGACATGT TTATAACACA ACAAGATATA GGTTACATT  
TGATACATTA TATATAACTT 2220

CTGTCACACG ACTCAAAAGT CTTCTTAAT TTCTTGAATT CAATGATCGA  
TCAAACTAAG 2280

ACACGTAAAA TGAAACGGGG AATAGTAATT CTGTTGCTT  
ATGTGATCAT TGTAGTTGGT 2340

GAACCATGGA ATTCCACATG AAGTAATGGA CACAGTAGAG AAAATGACAA  
AGGGACATTA 2400

CAAGAAGTGC ATGGAACAGA GGTTAAGGA ACTAGTGGCA  
AGTAAGGGAC TTGAGGCTGT 2460

TCAAGCTGAG GTTACTGATT TAGATTGGGA AAGCACTTTC  
TTCTTGCGCC ATCTTCCTAC 2520

TTCTAATATC TCTCAAGTAC CCGATCTTGA CGAAGAATAC  
AGGTACATAC ATGTGT<sub>CCTA</sub> 2580

CATATTGCGT ATATAATAAA TAAACACAAA ATTTAAGTTA  
TATACGCTGA CAGTATAACT 2640

AATTATAATG TTGTACCAAA TGATGCAGAG AGGTGATGAG

5'-3' 1990-1991

AGAAATTGGC TGAGGAGTTA CTTGACTTAC TCTGTGAAAA  
TCTTGGACTT GAAAAAGGTT 2760

ACTTGAAAAA TGCCTTAT GGATCAAAAG GTCCCAACTT TGGTACTAAA  
GTTAGCAACT 2820

ATCCACCATG TCCTAAGCCC GATTGATCA AGGGACTCCG  
CGCTCATACA GACGCAGGAG 2880

GCATCATACT TCTGTTCCAA GATGACAAAG TGAGTGGCCT  
TCAACTCCTC AAAGACGAGC 2940

AATGGATCGA TGTTCTCCC ATGCGCCACT CTATTGTGGT TAAC<sub>CTTGGT</sub>  
GACCAACTTG 3000

AGGTACAAGA TTCACTAAGT GTGTGTGTTT TTATCACTAT  
AACTTAGAAG TAGTAACTAA 3060

AAATGGTATT AATGAAATGT TATAAAAACA GGTGATCACT  
AACGGGAAGT ACAAGAGTGT 3120

GCTGCACAGA GTAATTGCAC AAACAGACGG GACACGAATG  
TCATTAGCCT CATTACAA 3180

TCCA<sub>GGAAAGT</sub> GATGCAGTAA TATATCCAGC AAAAACTTTG GTTGGAAAAG AGGCAGAGGA  
3240

AAGTACACAA GTGTATCCAA AGTTGTGTT TGATGATTAC  
ATGAAGTTAT ATGCTGGACT 3300

CAAGTTCAA GCCAAAGAGC CAAGATTGA AGCAATGAAG  
GCAATGGAAA GTGATCCAAT 3360

TGCAAGTGCT TAGATCCCAA TTCAATTAAA AAAATTGGTG TTGGAGAAAT  
ATATTTAAAT 3420

ATAGCAATCT ATGTATACAC ATTATTGCT CTTCTTATGT ATGGTAGAAT  
AAAGTTAGTA 3480

TTAAAAAAAGA TTGTGATITG CTGCATATGT ATCAAAAAGA

AAATAAGGTG CCTTCTAGTG AAATTATACA AATAATAATT  
TGGAGTGTAT TGTTCTTCT 3600

CATGTAATT AACTTTAAG TATCTTACTT TACAATATAC TGTTCACTTA TTGAACATAT  
3660

**TGAGTGATAT ATTGACTCAA T 3681**

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 22 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:

(B) CLONE: oligo dT-primed cDNA - page 13

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

**CATTCAATCTC TTCAATCTT TG 22**

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 26 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:

(B) CLONE: oligo dT-primed cDNA (SEQ3) page 13

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

CTTAATTCT TGGTAAAGTG TTTTCC 26